

Application No. 10/791,965
Amendment Dated March 27, 2006
Reply to Office Action of January 26, 2006

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A system for rendering at least one image interactive from the point of view of a user, the system comprising:

software for processing the at least one image so that one image layer is provided for each of the at least one images;

software for delivering each image layer sequentially to a display device capable of displaying the at least one image layer;

software for displaying each image layer such that only one image layer is the currently viewable image layer from the point of view of the user at any given time;

software for providing a transparent layer that overlies the currently viewable image layer whereby the transparent layer is not perceptible from the point of view of the user; and

software for enabling the at least one interactive function that causes the software for providing the transparent layer to move the transparent layer from a first position on the display to a second position on the display and the currently viewable image layer to move to the second position on the display.

2. (Original) The system of claim 1, wherein the at least one image comprises a plurality of images of at least one object wherein each image represents a view of the at least one object that is captured at a different angle with respect to the at least one object.

3. (Currently amended) The system of claim 1, wherein the at least one ~~images~~ image comprises a plurality of images of at least one object wherein each image represents a view of the at least one object that was captured at a different angle in a particular plane of the at least one object.

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4. (Original) The system of claim 3, wherein each image in the plurality of images represents a view of the at least one object that is captured at a different angle in a particular plane of the at least one object through 0 to 360 degrees or some fraction thereof.
5. (Original) The system of claim 4, wherein the software for enabling the at least one interactive function causes the software for displaying each image layer to sequentially display each image layer as the currently viewable image layer to provide the illusion of movement in three dimensions.
6. (Original) The system of claim 5, wherein the software for enabling the at least one interactive function accepts input from the user that controls the degree to which the user perceives the illusion of movement in three dimensions.
7. (Original) The system of claim 5, wherein the software for enabling the at least one interactive function accepts input from the user that controls the degree to which and the speed with which the user perceives the illusion of movement in three dimensions.
8. (Original) The system of claim 1, wherein the software for enabling the at least one interactive function causes the software for displaying each image layer to increase the resolution of the currently viewable image layer.
9. (Original) The system of claim 1, wherein the software for enabling the at least one interactive function causes the software for displaying each image layer to increase the resolution of the currently viewable image layer by increasing the size of the currently viewable image layer by equal amounts in the horizontal direction and in the vertical direction.
10. (Original) The system of claim 1, wherein the software for displaying each image layer further includes displaying the currently viewable image layer in a viewable area defined by an adjustable border.
11. (Original) The system of claim 10, wherein the software for enabling the at least one interactive function causes the software for displaying each image layer to increase the resolution of the currently viewable image layer and the size of the adjustable border of the viewing area.
12. (Original) The system of claim 10, wherein the software for enabling the at least one interactive function causes the software for displaying each image layer to increase the resolution

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of the currently viewable image layer by increasing the size of the currently viewable image layer by equal amounts in the horizontal direction and the vertical direction.

13. (Original) The system of claim 10, wherein the software for enabling the at least one interactive function causes the software for displaying each image layer to increase the resolution of the currently viewable image layer by increasing the size of the currently viewable image layer by equal amounts in the horizontal direction and the vertical directions and to increase the size of the adjustable border of the viewing area by equal amounts in the horizontal direction and the vertical direction.

14. (Currently amended) The system of claim 11, wherein ~~in~~ the increase in size of the currently viewable image layer and the increase in size of the adjustable border of the viewing area is substantially the same.

15. (Original) The system of claim 1, wherein the software for enabling the at least one interactive function causes the software for displaying each image layer to move the currently viewable image layer from a first position on the display to a second position on the display.

16. (Original) The system of claim 1, further including software for displaying a tool bar layer in which a tool bar is disposed, wherein the tool bar layer is perceptible from the point of view of the user along with the currently viewable image layer.

17. (Withdrawn) The system of claim 1, further including software for providing a transparent layer that overlies the currently viewable image layer whereby the transparent layer is not perceptible from the point of view of the user.

18. (Withdrawn) The system of claim 17, wherein the software for enabling the at least one interactive function causes the software for providing the transparent layer to move the transparent layer from a first position on the display to a second position on the display.

19. (Withdrawn) The system of claim 17, wherein the software for enabling the at least one interactive function causes the software for providing the transparent layer to move the transparent layer from a first position on the display to a second position on the display and the currently viewable image layer to move to the second position on the display.

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20. (Original) The system of claim 1, further including software for providing a first transparent layer that overlies the currently viewable image layer and a second transparent layer that lies between the first transparent layer and the currently viewable image layer whereby the first and second transparent layers are not perceptible from the point of view of the user.

21. (Original) The system of claim 20, wherein the software for enabling the at least one interactive function causes the software for providing the first transparent layer to move the first transparent layer from a first position with respect to the second transparent layer to a second position, whereby a line is drawn on the second transparent layer which corresponds to the distance between the first position and the second position.

22. (Original) The system of claim 21, wherein the distance between the first position and the second position corresponds to an actual physical dimension of an object depicted in the at least one image.

23. (Currently amended) A system for delivering and allowing interactivity with images so as to provide a virtual three-dimensional effect to a user on a display, comprising:

a plurality of images of at least one object, the plurality of images being combined to form a set of images;

software associated with and in operable communication with the set of images which controls the display of the set of images such that only one of the images will be perceivable by a user on the display at a given point in time;

software associated with and in operable communication with the set of images which enables at least one interactive function to be carried out with respect to the set of images, whereby the interactive function will give the user the illusion that the object is moving in three dimensions;

software associated with and in operable communication with the set of images that provides a transparent layer that overlies the currently perceivable image whereby the transparent layer is not perceptible from the point of view of the user; and

software associated with and in operable communication with the set of images that enables the at least one interactive function that causes the software for providing the

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transparent layer to move the transparent layer from a first position on the display to a second position on the display and the currently perceivable image to move to the second position on the display.

24. (Original) The system of claim 23, wherein the plurality of images are digital images.
25. (Original) The system of claim 24, wherein the language of the software is dynamic hypertext mark up language.
26. (Original) The system of claim 24, wherein the language of the software is a combination of dynamic hypertext mark up language and JAVASCRIPT.
27. (Currently amended) The system of claim 23, wherein the software for controlling the display provides each image in a separate image layer, and only one ~~such~~ image layer is viewable by a user at any given time.
28. (Original) The system of claim 23, wherein the plurality of images further comprise different images of the at least one object which are captured in at least one plane of the object through 0 to 360 degrees or some fraction thereof.
29. (Original) The system of claim 28, wherein the software for the interactive function simulates the rotation of the object through three dimensions by sequentially first displaying and then hiding each image layer to the user at discrete increments of time.
30. (Original) The system of claim 29, wherein the discrete increments of time are capable of being specified by the user.
31. (Original) The system of claim 23, wherein the plurality of images further comprise different images of the at least one object which are captured in a plurality of planes of the object through 0 to 360 degrees or some fraction thereof.
32. (Original) The system of claim 31, wherein the software for the interactive function simulates the rotation of the object through three dimensions in each of the plurality of planes by sequentially first displaying and then hiding each image layer to the user at discrete increments of time.

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33. (Original) The system of claim 23, wherein the software for controlling the display provides a tool bar layer that is perceivable by the user in addition to the one image layer viewable by the user at any given time.

34. (Original) The system of claim 23, wherein the software for controlling the display provides each image in a separate layer, each such image layer has approximately the same height and width as every other image layer, and only one such image layer is viewable by a user at any given time.

35. (Original) The system of claim 34, wherein the software for controlling the display further provides a transparent layer which is sized to approximate the height and width of the image layers and is disposed on top whichever one image layer is viewable by a user at any given time.

36. (Original) The system of claim 23, wherein the software for interactive function enables the at least one object in the set of images to be moved in the horizontal, vertical or diagonal directions on the display.

37. (Original) The system of claim 23, wherein the software for interactive function enables the at least one object in the set of images to be zoomed in on to a selected degree.

38. (Original) The system of claim 37, wherein the selected degree is controlled by a zoom factor.

39. (Original) The system of claim 23, wherein the software for interactive function enables at least one dimension of the at least one object in the set of images to be measured and correlated with a corresponding actual physical dimension of the at least one object.

40. (Original) The system of claim 23, wherein the software for the interactive function enables the at least one object in the set of images to be moved in the horizontal, vertical or diagonal directions on the display by calculating the difference between a first x coordinate and a first y coordinate on the transparent layer and a second x coordinate and a second y coordinate on the transparent layer and by translating the image layers in the set of images a distance on the display corresponding to the difference.

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41. (Currently amended) A system for delivering and allowing interactivity with images so as to provide an interactive two-dimensional effect to a user on a display, comprising:

at least one image of at least one object, the at least one image comprising a set of images;

software associated with and in operable communication with the set of images which controls the display of the set of images such that only one of the images will be perceivable by a user on the display at a given point in time;

software associated with and in operable communication with the set of images which enables at least one interactive function to be carried out with respect to the set of images, whereby the interactive function will give the user the illusion that the object is moving horizontally or vertically on the display;

software associated with and in operable communication with the set of images that provides a transparent layer that overlies the currently perceivable image whereby the transparent layer is not perceptible from the point of view of the user; and

software associated with and in operable communication with the set of images that enables the at least one interactive function that causes the software for providing the transparent layer to move the transparent layer from a first position on the display to a second position on the display and the currently perceivable image to move to the second position on the display.

42. (Currently amended) A system for delivering and allowing interactivity with images so as to provide an interactive two-dimensional effect to a user on a display, comprising:

at least one image of at least one object, the at least one image comprising set of images;

software associated with and in operable communication with the set of images which controls the display of the set of images such that only one of the images will be perceivable by a user on the display at a given point in time;

software associated with and in operable communication with the set of images which enables at least one interactive function to be carried out with respect to the set of

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images, whereby the interactive function will give the user the illusion that the object is increasing in size on the display;

software associated with and in operable communication with the set of images that provides a transparent layer that overlies the currently perceivable image whereby the transparent layer is not perceptible from the point of view of the user; and

software associated with and in operable communication with the set of images that enables the at least one interactive function that causes the software for providing the transparent layer to move the transparent layer from a first position on the display to a second position on the display and the currently perceivable image to move to the second position on the display.

43. (Currently amended) A system for delivering and allowing interactivity with images so as to provide an interactive two-dimensional effect to a user on a display, comprising:

at least one image of at least one object, the at least one image comprising a set of images;

software associated with and in operable communication with the set of images which controls the display of the set of images such that only one of the images will be perceivable by a user on the display at a given point in time;

software associated with and in operable communication with the set of images which enables at least one interactive function to be carried out with respect to the set of images, whereby the interactive function will give the use the illusion that the object is being moved from a first position to a second position on the display;

software associated with and in operable communication with the set of images that provides a transparent layer that overlies the currently perceivable image whereby the transparent layer is not perceptible from the point of view of the user; and

software associated with and in operable communication with the set of images that enables the at least one interactive function that causes the software for providing the transparent layer to move the transparent layer from a first position on the display to a

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second position on the display and the currently perceivable image to move to the second position on the display.

44. (Currently amended) A method for interacting with images, the method comprising:
- providing at least one image in a digital format;
 - processing the at least one image so that one image layer is provided for each of the at least one images;
 - delivering the at least one image layer to a user, so that only one of the at least one image layers is perceptible to the user at any given point in time;
 - enabling at least one interactive function with respect to the at least one image, so that the user perceives the illusion of motion in two dimensions or three dimensions;
 - providing a transparent layer that overlies a currently perceptible image layer whereby the transparent layer is not perceptible from the point of view of the user; and
 - enabling the at least one interactive function that causes the software for providing the transparent layer to move the transparent layer from a first position on the display to a second position on the display and the currently perceptible image layer to move to the second position on the display.
45. (Original) The method of claim 44, wherein enabling the at least one interactive function includes enlarging the image in the at least one image layer that is perceptible to the user to increase resolution of the image.
46. (Original) The method of claim 45, wherein enlarging the image in the at least one image layer that is perceptible to the user enlarges the image to an equal degree in the horizontal direction and in the vertical direction.
47. (Currently Amended) A system for capturing at least one image of an object comprising:
- an image-capturing device having:
 - an area in which an object can be disposed for imaging, the area having an interior surface and an exterior surface;
 - at least one lens coupled to a camera, the at least one lens being in operable communication with the interior of the area;

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means for commanding the at least one camera to acquire the at least one image of the object via the at least one lens;

means for delivering the at least one image to a computer readable storage device;

a computer usable medium having computer readable program code embodied therein configured for rendering the at least one image interactive from the point of view of a user comprising:

computer readable code configured to upload the at least one image from the storage device into the computer usable medium having computer readable program code embodied therein;

computer readable code configured to process the uploaded at least one image so that an image layer is provided for the at least one image;

computer readable code configured to deliver the image layer to a user on a display, causing only one image layer to be perceptible to the user at any given time whereby the image layer perceptible to the user at any given time is the currently viewable image layer;

computer readable code configured to enable at least one interactive function with respect to the at least one image, so that the user perceives the illusion of motion in two dimensions or three dimensions on the display;

computer readable code configured to provide a transparent layer that overlies a currently viewable image layer whereby the transparent layer is not perceptible from the point of view of the user; and

computer readable code configured to enable the at least one interactive function to be carried out by moving the transparent layer from a first position on the display to a second position on the display and by moving the currently viewable image layer to the second position.

48. (Original) The system of claim 47, wherein the interior surface is cylindrically shaped.
49. (Original) The system of claim 47, wherein the interior surface is spherically shaped.
50. (Currently amended) A system for capturing at least one image of an object and rendering the at least one image capable of being interacted with by a user, comprising:

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an image-capturing device comprising:

an approximately cylindrically shaped barrel having an exterior surface and an interior surface, the interior surface defining an interior aperture in which an object can be situated;

at least one lens associated with and in operable communication with at least one camera, the at least one lens exposed to the interior aperture;

means for commanding the at least one camera to acquire the at least one image of the object via the at least one lens;

means for delivering the at least one image to a computer readable storage device;

a computer usable medium having computer readable program code embodied therein configured for rendering the at least one image interactive from the point of view of a user comprising:

computer readable code configured to upload the at least one image from the storage device into the computer usable medium having computer readable program code embodied therein;

computer readable code configured to process the uploaded at least one image so that an image layer is provided for the at least one image;

computer readable code configured to deliver the image layer to a user on a display, causing only one image layer to be perceptible to the user at any given time whereby the image layer perceptible to the user at any given time is the currently viewable image layer;

computer readable code configured to enable at least one interactive function with respect to the at least one image, so that the user perceives the illusion of motion in two dimensions or three dimensions on the display;

computer readable code configured to provide a transparent layer that overlies a currently viewable image layer whereby the transparent layer is not perceptible from the point of view of the user; and

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computer readable code configured to enable the at least one interactive function to be carried out by moving the transparent layer from a first position on the display to a second position on the display and by moving the currently viewable image layer to the second position.

51. (Currently amended) A system for capturing a set of images of an object that can be displayed to a user so as to provide the user with a three-dimensional effect with respect to the object, comprising:

an enclosure having a closeable opening through which the object to be imaged can be inserted;

at least one lens coupled to a device for capturing the set of images disposed in the interior of the enclosure;

a lighting source delivered to the interior of the enclosure to illuminate the object during the image capturing process;

means for commanding the at least one camera to acquire the at least one image of the object via the at least one lens;

means for delivering the at least one image to a computer readable storage device;

a computer usable medium having computer readable program code embodied therein configured for rendering the at least one image interactive from the point of view of a user comprising:

computer readable code configured to upload the at least one image from the storage device into the computer usable medium having computer readable program code embodied therein;

computer readable code configured to process the uploaded at least one image so that an image layer is provided for the at least one image;

computer readable code configured to deliver the image layer to a user on a display, causing only one image layer to be perceptible to the user at any given time whereby the image layer perceptible to the user at any given time is the currently viewable image layer;

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computer readable code configured to enable at least one interactive function with respect to the at least one image, so that the user perceives the illusion of motion in two dimensions or three dimensions on the display;

computer readable code configured to provide a transparent layer that overlies a currently viewable image layer whereby the transparent layer is not perceptible from the point of view of the user; and

computer readable code configured to enable the at least one interactive function to be carried out by moving the transparent layer from a first position on the display to a second position on the display and by moving the currently viewable image layer to the second position.

52. (Currently amended) A system for capturing a plurality of images of an object, comprising:

an image-capturing device having:

an area in which an object can be disposed for imaging, the area having an interior surface and an exterior surface;

at least one lens coupled to a at least one camera, the at least one lens being in operable communication with the interior of the area;

means for commanding the at least one camera to acquire a first image of the object via the at least one lens;

means for moving the at least one camera relative to the object; means for commanding the at least one camera to acquire a second image of the object via the at least one lens;

means for processing the first image and second image so that the first image and the second image are provided in at least one image layer;

~~means for delivering the first image and the second image to a user~~

a computer usable medium having computer readable program code embodied therein configured for rendering the at least one image interactive from the point of view of a user comprising:

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computer readable code configured to upload the at least one image layer into the computer usable medium having computer readable program code embodied therein;

computer readable code configured to deliver the image layer to a user on a display, causing only one image layer to be perceptible to the user at any given time whereby the image layer perceptible to the user at any given time is the currently viewable image layer;

computer readable code configured to enable at least one interactive function with respect to the at least one image layer, so that the user perceives the illusion of motion in two dimensions or three dimensions on the display;

computer readable code configured to provide a transparent layer that overlies a currently viewable image layer whereby the transparent layer is not perceptible from the point of view of the user; and

computer readable code configured to enable the at least one interactive function to be carried out by moving the transparent layer from a first position on the display to a second position on the display and by moving the currently viewable image layer to the second position.

53. (Original) The system of claim 52, wherein the means for moving the camera relative to the object as images in the set of images are captured is software that controls movement of the lens.

54. (Currently amended) A system for capturing at least one image of an object, comprising:
an image-capturing device having:

an area in which an object can be disposed for imaging, the area having an interior surface and an exterior surface;

at least one lens coupled to a camera, the at least one lens being in operable communication with the interior of the area;

means for commanding the at least one camera to acquire the at least one image of the object via the at least one lens;

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means for delivering the at least one image to a lenticular sheet on which a plurality of images of an object have been deposited on a plurality of lenticular lenses, whereby a user is provided with the illusion of movement when pressure is applied to different portions of the lenticular sheet.

55. (Withdrawn) A lenticular sheet on which a plurality of images of an object have been deposited on a plurality of lenticular lenses, whereby a user is provided with the illusion of movement when pressure is applied to different portions of the lenticular sheet.

56. (Original) A lenticular sheet assembly, the assembly comprising:

a support surface layer,

a lenticular layer containing a plurality of lenticular lenses on which at least one image has been deposited;

means for retaining the, lenticular layer on the support surface layer
wherein the means for retaining provides a gap between the lenticular layer and the support surface layer.

57. (Original) The lenticular sheet assembly of claim 56, wherein the gap permits relative movement between the lenticular layer and the support surface layer when pressure is applied to the lenticular layer.

58. (New) A system for capturing at least one image of an object comprising:

a computer usable medium having computer readable program code embodied therein configured for rendering at least one image that is interactive from the point of view of a user comprising:

computer readable code configured to upload the at least one image from a storage device into the computer usable medium having computer readable program code embodied therein;

computer readable code configured to process the uploaded at least one image so that an image layer is provided for the at least one image;

computer readable code configured to deliver the image layer to a user on a display, causing only one image layer to be perceptible to the user at any given

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time whereby the image layer perceptible to the user at any given time is the currently viewable image layer;

computer readable code configured to enable at least one interactive function with respect to the at least one image, so that the user perceives the illusion of motion in two dimensions or three dimensions on the display;

computer readable code configured to provide a transparent layer that overlies a currently viewable image layer whereby the transparent layer is not perceptible from the point of view of the user; and

computer readable code configured to enable the at least one interactive function to be carried out by moving the transparent layer from a first position on the display to a second position on the display and by moving the currently viewable image layer to the second position.